Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1(Currently Amended). A protein expression vector comprising a secretory nucleotide signal and, in the 3' downstream side thereof, a Tag nucleotide sequence, a cleavable nucleotide sequence and (a) a nucleotide sequence encoding an IgG(κ) or a trypsin secretory signal peptide, (b) a nucleotide sequence encoding a polyhistidine amino acid sequence, (c) a nucleotide sequence encoding an amino acid sequence comprising amino acid residues 36-40 of SEQ ID NO:19 (Asp-Asp-Asp-Lys), which is cleavable by an enterokinase, and (d) a cloning site into which a nucleotide sequence encoding a target protein can be inserted, in this order wherein (a), (b), (c) and (d) are assembled within the vector in the order recited.

2 (Currently amended). The protein expression vector according to claim 1, wherein a nucleotide sequence encoding a target protein is inserted in the cloning site (d).

3 (Currently amended). The protein expression vector according to claim 1, wherein the cloning site or the

nucleotide sequence encoding the target protein is present successively at the 3' end of the cleavable nucleotide sequence (c) Asp Asp Asp Lys.

4 (Currently amended). The protein expression vector according to claim 1, wherein a nucleotide sequence the expression vector further comprises a polynucleotide encoding at least one amino acid residue, wherein said polynucleotide is located between the 3' end of the nucleotide sequence encoding the $IgG(\kappa)$ or the trypsin secretory signal peptide and the 5' end of the nucleotide sequence (c) is contained as a spacer nucleotide sequence in the 3' downstream side of the secretory signal nucleotide sequence, but in the 5' upstream side of the cleavable nucleotide sequence.

5 (Currently amended). The protein expression vector according to claim 4, wherein the spacer nucleotide sequence polynucleotide encoding at least one amino acid residue is a nucleotide sequence encoding at least the an amino acid sequence of comprising amino acid residues 24-29 of SEQ ID NO:19 (Leu-Val-His-Gly-Lys-Leu) (amino acid residues 24-29 of SEQ ID NO:19).

6 (Currently amended). The protein expression vector according to claim 4, wherein the spacer nucleotide sequence polynucleotide encoding at least one amino acid residue is

composed of at least a cleavable nucleotide sequence <u>encoding</u> amino acid residues 36-40 of SEQ ID NO:19 (Asp-Asp-Asp-Lys).

Claims 7-11 (Cancelled).

12 (Previously presented). The protein expression vector according to claim 1, further comprising a nucleotide sequence encoding an antibody recognition epitope.

13 (Currently amended). The protein expression vector according to claim [[1]] $\underline{2}$, wherein the nucleotide sequence encoding the target protein is that encoding neurosin.

14 (Currently amended). Host cells A host cell transformed with the protein expression vector according to claim [[1]] 2.

15 (Currently amended). The host cell eells according to claim 14, wherein said cell is an animal cell which are animal cells.

16 (Currently amended). The host cell eells according to claim 15, wherein said animal cell is a mammalian cell the animal cells are mammalian cells.

17(Currently amended). The host cell cells according to claim 15, wherein <u>said animal cell is an insect cell the animal cells are mammalian cells</u>.

18 (Currently amended). A method process for producing a target protein, wherein said method which comprises cultivating a host cell transformed with the vector of claim 2 using the protein expression vector according to claim 1.

19 (Withdrawn). A target protein which is obtained by the method according to claim 18.

20 (Currently amended). A method process for producing a recombinant fusion protein comprising an amino acid sequence of a target protein, wherein said method comprises cultivating a host cell transformed with the vector of which comprises using the protein expression vector or the host cells according to claim [[1]] 2 to produce the recombinant fusion protein.

21 (Withdrawn). A recombinant fusion protein comprising the amino acid sequence of the target protein obtained by the process according to claim 20.

22 (Withdrawn). A process for producing a target protein which comprises retaining the recombinant fusion protein according to claim 21 with a substance capable of recognizing at least one of Tag and an epitope in said recombinant fusion protein, liberating the recombinant fusion protein from the substance to purify it, and releasing the target protein by reacting said purified recombinant fusion protein with an enzyme

capable of recognizing the cleavable site within said recombinant fusion protein, followed by collecting the released target protein.

23 (Withdrawn). A process for producing a target protein, which comprises retaining the recombinant fusion protein according to claim 21 with a substance capable of recognizing at least one of Tag and an epitope in said recombinant fusion protein, and releasing the target protein by reacting said purified recombinant fusion protein with an enzyme capable of recognizing the cleavable site within said recombinant fusion protein, followed by collecting the released target protein.

24 (Withdrawn). A target protein is obtained by the process according to claim 22.

25(Currently amended). A <u>method process</u> for producing a target protein, wherein said method comprises comprising cultivating the host <u>cell of cells according to claim 14 to produce the target protein.</u>

26 (Withdrawn). A target protein obtained by the process according to claim 25.

27(Currently amended). A <u>method</u> process for producing a recombinant fusion protein comprising an amino acid sequence of a target protein, <u>wherein said method</u> which comprises cultivating

the host cell of claim 14 to produce the recombinant fusion protein cells according to claim 1.

28 (Withdrawn). A recombinant fusion protein comprising the amino acid sequence of the target protein obtained by the process according to claim 27.

29 (Withdrawn). A target protein which is obtained by the process according to claim 23.

30 (New). A host cell transformed with the protein expression vector of claim 1.